

Amendments to the Claims

The claims are not amended, but are re-presented here for convenience.

1. (original) An apparatus, comprising:
a first electronic device adapted to perform
a training phase with multiple second electronic devices to calculate
parameters to enable substantially simultaneous spatial division multiple access
transmissions to multiple ones of the multiple second electronic devices; and
a data phase by using the parameters to perform the spatial division
multiple access transmissions.
2. (original) The apparatus of claim 1, wherein the first electronic device is further
adapted to perform an acknowledgement phase by using the parameters to perform
substantially simultaneous spatial division multiple access transmissions of
acknowledgements to the multiple ones of the second electronic devices subsequent to
the data phase.
3. (original) The apparatus of claim 1, wherein the first electronic device is further
adapted to perform the data phase by:
transmitting substantially simultaneous data polls to the multiple ones of the
multiple second electronic devices through multiple antennas; and
receiving substantially simultaneous data responses from the multiple ones of
the multiple second electronic devices through multiple antennas.

4. (original) The apparatus of claim 1, wherein the first electronic device is further adapted to perform the training phase by:

transmitting training polls to the multiple second electronic devices;
receiving training responses from the multiple second electronic devices
through multiple antennas;
processing the training responses received through the multiple antennas; and
calculating the parameters based on the processed training responses.

5. (original) The apparatus of claim 1, wherein the parameters comprise beam forming parameters.

6. (original) The apparatus of claim 1, wherein the parameters are further to enable substantially simultaneous spatial division multiple access receptions from the multiple ones of the multiple second electronic devices.

7. (original) The apparatus of claim 1, wherein the first electronic device further comprises at least four antennas to communicate with the multiple second electronic devices during the training phase and the data phase.

8. (original) The apparatus of claim 7, wherein the first electronic device further comprises a computing platform coupled to the at least four antennas.

9. (original) The apparatus of claim 8, wherein the first electronic device further comprises at least four modulator/demodulators with at least one

modulator/demodulator coupled between each of the at least four antennas and the computing platform.

10. (original) The apparatus of claim 9, wherein the first electronic device further comprises multiple analog-to-digital converters and multiple digital-to-analog converters with at least one analog-to-digital converter and at least one digital-to-analog converter coupled between each modulator/demodulator and the computing platform.

11. (original) A method, comprising:

- transmitting a training poll to a first mobile device;
- receiving a training response from the first mobile device;
- transmitting a training poll to a second mobile device;
- receiving a training response from the second mobile device;
- calculating parameters based on the received training response from the first mobile device and the received training response from the second mobile device; and
- using the parameters to enable spatial division multiple access transmissions to the first and second mobile devices.

12. (original) The method of claim 11, wherein said using comprises:

- transmitting a first data poll to the first mobile device and a second data poll to the second mobile device substantially simultaneously using spatial division multiple access techniques; and

receiving a response to the first data poll from the first mobile device and a response to the second data poll from the second mobile device substantially simultaneously.

13. (original) The method of claim 12, further comprising transmitting, subsequent to said receiving, an acknowledgement to the first mobile device and an acknowledgement to the second mobile device substantially simultaneously using the spatial division multiple access techniques.

14. (original) The method of claim 13, wherein said calculating the parameters comprises calculating beam forming parameters.

15. (original) The method of claim 13, wherein the parameters are further used to enable spatial division multiple access receptions from the first and second mobile devices.

16. (original) A machine-readable medium that provides instructions, which when executed by a processing platform, cause said processing platform to perform operations comprising:

transmitting a training poll to a first device;

receiving a training response from the first device;

transmitting a training poll to a second device;

receiving a training response from the second device;

calculating parameters based on the received training response from the first device and the received training response from the second device; and

using the parameters to enable substantially simultaneous transmissions to the first and second devices using spatial division multiple access techniques.

17. (original) The medium of claim 16, wherein said operations further comprise:

using the parameters to enable transmitting a data poll to the first device and a data poll to the second device substantially simultaneously using the spatial division multiple access techniques; and

using the parameters to enable receiving a data response from the first device and a data response from the second device substantially simultaneously using the spatial division multiple access techniques.

18. (original) The medium of claim 17, wherein said operations further comprise using the parameters to enable transmitting an acknowledgement to the first device and an acknowledgement to the second device substantially simultaneously using the spatial division multiple access techniques.

19. (original) The medium of claim 16, further comprising using the parameters to enable substantially simultaneous receptions from the first and second devices using the spatial division multiple access techniques.